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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,765	03/20/2007	Mahendra G. Dedhiya	MERZ-49 PCT US	1522
25666 7590 04/15/2009 THE FIRM OF HUESCHEN AND SAGE SEVENTH FLOOR, KALAMAZOO BUILDING 107 WEST MICHIGAN AVENUE KALAMAZOO, MI 49007				
EXAMINER				
THOMAS, TIMOTHY P				
ART UNIT		PAPER NUMBER		
1614				
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04/15/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/578,765

Applicant(s)

DEDHIYA ET AL.

Examiner

TIMOTHY P. THOMAS

Art Unit

1614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 13-32, 39-41 and 44 is/are pending in the application.
- 4a) Of the above claim(s) 17-25 and 27-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 13-16, 26, 39-41 and 44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 8/18/2008: 3/2/2009
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The Office Action mailed 12/4/2008 has been vacated, pursuant to the granted petition decision.
2. The amendment submitted 3/2/2009 has been entered. With respect to the Specification Amendment changing the compound name identified in Tables 2 and 7-10, this amendment is entered. Support for this amendment was disclosed in specification paragraphs 0073 and 0077, which describe solutions of neramexane mesylate and state that the results of experiments conducted using these solutions are shown in Tables 2 and 7-10.

Priority

3. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.
4. The Application Data Sheet filed 8/18/2008 properly establishes the benefit claim to provisional U.S. application No. 60/517981, filed 11/5/2003.

Election/Restrictions

5. This application contains claims 17-25 and 27-32 drawn to an invention nonelected with traverse in the reply filed on 2/14/2008. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.
6. Claims 17-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or

linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 2/14/2008.

These claims are withdrawn due to the amendment to exclude compositions containing only the elected ingredients; as amended these claims require additional, non-elected components to the elected composition.

Response to Arguments

7. Applicants' arguments, filed 3/2/2009 and 8/18/2008, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

8. In the 8/18/2008 Reply, applicant continues to argue that the amended claims do not lack unity of invention, arguing that the "special common technical feature" is a preservative free aqueous-based neramexane composition. This argument is not persuasive for the reasons of record, and the rejections that are presently applied to the claims under examination. The request to examine claims 45 and 48-55 is no longer relevant, since these claims have been canceled.

9. In the 3/2/2009 Reply, applicant reiterates that the amended invention involves unity of invention since the "special common technical feature" is a preservative free aqueous-based neramexane composition for oral administration. This argument is also not persuasive for the reasons of record, and the rejections that are maintained below

still demonstrate unity is lacking among the species. Rejoinder of claims 23-25 and 27-32 is not made since the elected species are not currently allowable.

10. Applicant's arguments with respect to the rejection of claims 1-3, 6-7, 12, 14-22 and 39-40 under 35 USC 102 have been fully considered but they are not persuasive:

Claims 1-3, 6-7, 14-16 and 39-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Parsons et al. (WO 01/98253 A2; 2001 Dec).

The extension of the discussion to address oral administration is necessitated by the claim amendment.

The rejection is maintained for the reasons of record. Claim 12 is canceled. Claims 17-22 have been withdrawn.

In the 8/18/2008 Reply, applicant argues that Parsons does not specifically disclose preservative free compositions comprising neramexane or a pharmaceutically acceptable salt thereof. This is not persuasive. The disclosure of the elected compound, 1-amino-1,3,3,5,5-pentamethylcyclohexane (neramexane; p. 6, middle; p. 8, 1st named compound; p. 51 table, MRZ 579) and the HCl salt of neramexane (MRZ 2/579; p. 2, 1st named compound) as active ingredients of the Parsons teaching along with Example 4, that names Active Ingredient, Sodium chloride and sterile water would permit one of ordinary skill in the art to immediately envisage the solution of example 4 where neramexane and neramexane HCl are used as the active ingredient. These solutions for injections do not name a preservative, and are therefore "preservative free", anticipating the claims. Additionally

In the 3/2/2009 Reply, applicant further argues that the claim amendment "for oral administration" is not taught by Parsons, therefore the instant claims are not anticipated by the disclosure of this reference. This is not accurate. Parsons does teach compositions "all for oral use", which include solutions (p. 21, last paragraph-p. 22, 1st paragraph). Additionally, the example 4 formulation, although identified as "for injection", would also inherently be useful as for oral administration. This is evidenced by instant claim 44, dependent on claim 1, which is now a formulation for oral administration containing water and neramexane mesylate; additionally, sodium chloride is commonly ingested with food, and therefore the solution taught, containing neramexane mesylate, purified water and sodium chloride, would be suitable for oral administration.

It is noted that In re Best (195 USPQ 430) and In re Fitzgerald (205 USPQ 594) discuss the support of rejections wherein the prior art discloses subject matter which there is reason to believe inherently includes functions that are newly cited or is identical to a product instantly claimed. In such a situation the burden is shifted to the applicants to "prove that subject matter shown to be in the prior art does not possess characteristic relied on" (205 USPQ 594, second column, first full paragraph).

11. Applicant's arguments with respect to the rejection of claims 1, 4-5 and 39-41 under 35 USC 103 have been fully considered but they are not persuasive:

Claims 1, 4-5 and 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parsons et al. (WO 01/98253 A2; 2001 Dec).

The arguments made in the in the 8/18/2008 Reply, based on surprising/unexpected results are based on this and the following rejection, which are discussed together below.

In the 3/2/2009 Reply, applicant has argued that surprising/unexpected anti-microbial properties have been disclosed, for which there is no teaching in Parsons. This point is addressed below.

12. Applicant's arguments with respect to the rejection of claims 1, 13, 26, and 44 under 35 USC 103 have been fully considered but they are not persuasive:

Claims 1, 13, 26, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parsons et al. (WO 01/98253 A2; 2001 Dec) and Gupta et al. (US 2005/0014743 A1; priority 2003 May).

In the 8/18/2008 Reply, applicants argue there is no teaching in the Parsons disclosure, alone or in combination with Gupta, to suggest the surprising /unexpected anti-microbial properties associated with neramexane disclosed in the instant specification, for example as pages 25-27.

In the 3/2/2009 Reply, applicants argue that Example 4 at p. 25 demonstrate preservative free neramexane mesylate samples were prepared and then tested; that the Table headings contain an obvious typographical error, which is clear from the description in Example 4 that the tables refer to neramexane mesylate and not memantine mesylate formulations. This argument is persuasive for entry of the specification amendment; the new Table headings demonstrate applicable unexpected data disclosed in the specification. Applicant further argues that Example 10 at pp.37-

38 of the instant specification discloses data demonstrating the antibacterial effectiveness of preservative free neramexane oral solutions, which also alleged to demonstrate superior/unexpected effects associated with neramexane.

It is noted that the data in tables 7-10 does demonstrate antimicrobial activity of solutions of neramexane mesylate and purified water, without any additional preservatives (or other additives), for neramexane mesylate at concentrations ranging from 5-250 mg/mL. However, Table 2, where neramexane mesylate is present at 0.5 mg/mL, does not show the same antimicrobial activity; in contrast, Table 2 shows growth of both *Candida albicans* and *Aspergillus niger* (columns D and E) at the lowest neramexane mesylate concentration. These results are not commensurate in scope with any of the rejected claims 1, 4-5, 13, 26, 39-41, or even 44. With respect to the most limited claims 4-5 and 44, claims 4-5 are not limited to the two components for which the data is present, but permit other solvents or additives that would be expected to modify the results, for example, the presence of 25-50% ethanol in water would be an solvent mixture for which antimicrobial activity would not be unexpected at any neramexane mesylate concentration; with respect to claim 44, the claim requires neramexane mesylate and purified water, USP, QS; however, the claim still encompasses low concentrations of neramexane mesylate, including 0.5 mg/mL, for which microbial growth was present. Additionally, none of the rejected claims (including claim 44) are limited to only the two components neramexane mesylate and purified water, USP, QS, for which any results are present. With respect to compositions containing additional components, such as salts, other non-active ingredients, or other

active ingredients, encompassed by the claims, there is no evidence of record that such formulations have antimicrobial activity. It is also noted that there is no comparative data to the Example 4 formulation of Parsons, which contains sodium chloride. The presence of sodium chloride (at 8 mg/mL) would be expected to modify the neramexane mesylate concentrations that are effective with antimicrobial activity.

Therefore the rejections are maintained for conditions outside of the scope for which antimicrobial activity is of record (demonstrated by Tables 7-10). It is noted that a composition claim limited to a composition consisting of 5-250 mg/mL neramexane mesylate and purified water, USP, QS would overcome the rejections of record under 35 USC 103, based on the unappreciated properties of antimicrobial activity.

With respect to Example 10, the specification does not state which components are present in the compositions of this example, including specifying the solvent or presence of other components beside neramexane mesylate. The description only states the neramexane mesylate concentrations (2, 5 and 10 mg/mL), that the solutions are "oral" (this term does not identify any components), and that they are "without preservative" (specifically that methylparaben and propylparaben levels are zero). Since the disclosure does not make clear what components are present or absent from the compositions, it is not possible to determine for which claim conditions the antimicrobial data of this example demonstrate unexpected results.

Conclusion

13. No claim is allowed.

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **TIMOTHY P. THOMAS** whose telephone number is (571)272-8994. The examiner can normally be reached on Monday-Thursday 6:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on (571) 272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy P Thomas/
Examiner, Art Unit 1614

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